Wisconsin Knowledge and Concepts Examinations

Criterion-Referenced Test

Educator's Guide



High School

Grade 10

Acknowledgments

CTB is indebted to the following for permission to use material in this book:

All trademark and trade names in this publication are the property of their respective companies and are not associated with the publisher of this publication.

Photograph of electric washing machine circa 1920 (Image No. HQ001303), copyright © by Schenectady Museum; Hall of Electrical History Foundation/Corbis. Used by permission.

"Unfolding Bud" by Naoshi Koriyama, copyright © 1957 The Christian Science Monitor, www.csmonitor.com. Used by permission. All rights reserved.



Developed and published under contract with the Wisconsin Department of Public Instruction by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2005 by the Wisconsin Department of Public Instruction. Based on a CTB template copyright © 1997 by CTB/McGraw-Hill LLC. Limited distribution of these materials has been made for testing and experimental purposes only. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the Wisconsin Department of Public Instruction and CTB/McGraw-Hill LLC.

This document provides educators with information regarding the reading and mathematics portions of the Wisconsin Knowledge and Concepts Examinations—Criterion-Referenced Test for grade 10. It is intended to serve as a resource for teachers and administrators, describing the development, format, content, and scoring of the WKCE–CRT.

Office of Educational Accountability
Wisconsin Department of Public Instruction
125 S. Webster St.
P.O. Box 7841
Madison, WI 53707-7841

The Wisconsin Department of Public Instruction does not discriminate on the basis of sex, race, religion, age, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional or learning disability.

Table of Contents

Chapter 1:	General Information				
	Purposes of the Educator's Guides	1			
	General Background for the WKCE–CRT	1			
	Overview of the Test Development Process and the Role of Wisconsin Educators	2			
Chapter 2:	Assessment Frameworks				
	Purpose and Development of the Assessment Frameworks	4			
Chapter 3:	Test Characteristics and Use of Results				
	Test Format	6			
	Test Design	6			
	Test Blueprint	7			
	Use of Test Results	10			
Chapter 4:	Reading				
	Reading Passage Characteristics	12			
	Number of Passages	13			
	Passage Length	13			
	Paired Reading Passages	13			
	Selection of Reading Passages	14			
	Sample Passages	15			
	Sample Reading Items: Selected Response	25			
	Reading Assessment Rubrics	35			
	Sample Reading Items: Constructed Response	36			

	General Information on CTB/McGraw-Hill Handscoring Facilities and Processes	36
	Providing Support for Constructed-Response Items	39
Chapter 5:	Mathematics	
	Mathematics Manipulatives	52
	Calculator Use Policy	53
	Sample Mathematics Items: Selected Response	55
	Mathematics Assessment Rubrics	70
	Sample Student Responses: Constructed Response	72
Chapter 6:	Appropriate Test Preparation Practices	
	Before Administering the Test	82
	Before the Test: Advice for Students and Parents	83
	On the Day of the Test	84
	After the Test	85

Chapter 4

General Information

Purposes of the Educator's Guides

The Educator's Guides to the WKCE–CRT were developed to provide Wisconsin educators with an overview of the reading and mathematics portions of the WKCE–CRT being administered for the first time in the 2005–2006 school year. A separate guide has been developed for each of these three levels: Elementary School, Middle School, and High School.

Each of these guides contains shared information about the test, including its general design and format, an explanation of how test results are used, a description of sound test administration procedures, and guidance for educators to help students prepare effectively for the test.

Individual guides contain grade-appropriate reading passages designed to illustrate the types of passages that students will encounter in the reading portion of the WKCE–CRT. Each guide also includes grade-appropriate selected-response and constructed-response questions for both reading and mathematics. To clarify how student responses to constructed-response questions are scored, the guides also include reading and mathematics rubrics along with scored sample student responses to selected constructed response items. These detailed descriptions and examples of selected-response and constructed-response questions are provided for educators as illustrations of the types of questions that will be found on the WKCE–CRT.

Links to other resources and information located at the Wisconsin Department of Public Instruction's website are provided throughout each guide.

General Background for the WKCE-CRT

Beginning in the 2005–2006 school year, the federal No Child Left Behind Act requires all states to test all students in reading and mathematics in grades 3–8 and once in high school (grade 10 under Wisconsin law s. 118.30). These tests are referred to as the Wisconsin Knowledge and Concepts Examinations—Criterion Referenced Tests (WKCE–CRT) and replace the WKCE reading and mathematics tests beginning in fall 2005. The WKCE–CRT also replaces the Wisconsin Reading Comprehension Test, which was previously administered to students in grade 3. Language Arts, Science, and Social Studies continue to be assessed at grades 4, 8, and 10. Student performance on these tests is reported in proficiency categories and is used to determine the adequate yearly progress of students at the school, district, and state levels. Summative information regarding student performance on statewide assessments can be found at http://dpi.wi.gov/sig/index.html.

The WKCE–CRT is a large-scale standardized achievement test. Standardized tests are administered using standard procedures for directions, time limits, and scoring criteria to ensure uniform testing conditions for all students. The purpose of achievement tests is to tell about student achievement and give a degree of insight into how well the curriculum prepared the student. If students in a given school score particularly well on some aspect of an achievement test, there is a good chance that their curriculum succeeded in preparing them for the test. Test results are one source of information educators can use to make decisions about whether and how to adjust instruction for individual students or groups of students.

A criterion-referenced test, the WKCE–CRT has been customized to measure the knowledge and skills Wisconsin educators have determined are appropriate and desirable for Wisconsin students. Customized criterion-referenced tests have many advantages for educators and students: 1) they help ensure that the content covered on an assessment aligns with classroom instruction, 2) they invite teacher involvement at all stages of the test development process, 3) they provide professional development activities for teachers engaged in the process of developing statewide standards for teaching and learning, 4) they provide clear learning goals for students.

The WKCE–CRT is a summative assessment and measures how well Wisconsin students have mastered the Wisconsin Model Academic Standards (WMAS). The reading test focuses on content standard A: Reading and Literature. The mathematics assessment focuses on all content standards of the WMAS. The reading and mathematics tests include both selectedresponse and constructed-response items. Students record responses to all questions in the test book. The selected-response items have four answer choices; students select one option for the correct answer. The constructed-response items allow students to demonstrate their skills at more complex levels of thinking and are scored by a professional staff experienced in providing reliable and consistent hand-scoring services. Short-answer items allow partial credit for partially answered questions.

Overview of the Test Development Process and the Role of Wisconsin Educators

Wisconsin educators have played a vital and essential role in the development of the WKCE–CRT. Because the WMAS exist only for grades 4, 8, and 12 and define the knowledge and skills students should acquire by the end of grades 4, 8, and 12, it was necessary for Wisconsin educators to establish grade-level content descriptors for grades 3, 5–7, and 10. Furthermore, it was necessary for Wisconsin educators to define what students should know and be able to do *at the beginning* of the school year,

as the WKCE–CRT is administered in the fall. In the fall of 2003, committees of teachers in both reading and math met to address this need. They worked together to create assessment frameworks documents that clarified the knowledge and skills in reading and math appropriate for Wisconsin students at the beginning of grades 3-8 and 10. The WMAS in reading and math served as the foundation for that work.

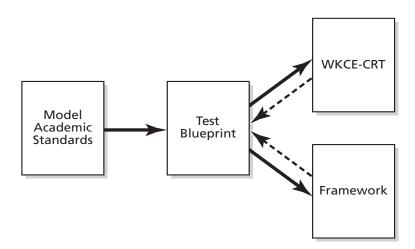
Committees of Wisconsin educators have participated in all stages of developing the WKCE-CRT. In addition to educators participating in the development of the content frameworks, teachers also participated in reviewing and selecting reading passages, reading items, and math items. Committees also met to review and edit the test items for content appropriateness, difficulty, and fairness prior to pilot testing. CTB/McGraw-Hill conducted item pilot testing in May 2004 and forms calibration in December 2004, based on a stratified random sample, drawing from all public schools in the state. The term forms calibration refers to the calibrating and equating steps necessary to compare both students' scores and the difficulty of items across multiple forms. Following the May 2004 pilot administration, a panel of educators met in October 2004 to review the statistical functioning of a sample of items. Wisconsin educators also participated in range finding to identify anchor papers for each score point of the constructed response items field-tested in 2004. A few Wisconsin teachers piloted the reading passages, reading items, and math items presented in this handbook so that sample items and sample student responses could be available to all Wisconsin educators.

Chapter Assessment Frameworks

Purpose and Development of the Assessment Frameworks

The reading and mathematics assessment frameworks describe the knowledge and skills measured by the WKCE–CRT at each grade. The assessment frameworks are based upon the Wisconsin Model Academic Standards (WMAS). Whereas the WMAS identify the knowledge and skills that students should master by the end of grades 4, 8, and 12, the assessment frameworks describe the knowledge and skills that students should possess at the beginning of the school year for grades 3–8 and 10. It is important to note, however, that the assessment frameworks are designed merely to support and reinforce classroom instruction toward student success on the WKCE–CRT; they are *not* in any way intended to replace a local curriculum. While the assessment frameworks describe the content assessed by the test, they are not meant to limit what should be taught at any given grade level.

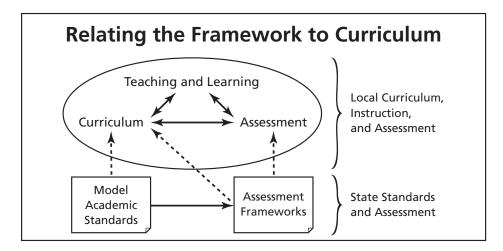
The diagram below shows the relationship between the Wisconsin Model Academic Standards, the test blueprint, the assessment frameworks, and the WKCE-CRT.



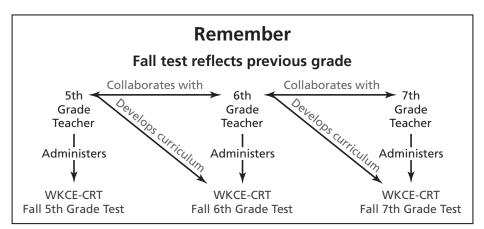
While considering the assessment frameworks, it is also important to recognize that even though a skill may not be measured at a given grade level, it does not necessarily follow that that skill should not be taught. If a student is expected to master a skill at a given grade level, it is important that the necessary foundation skills be taught in the previous grade or grades. The assessment frameworks may be useful to educators by fostering discussion across grades about the interrelation of skills and concepts taught at each level. The assessment frameworks intend for skills to be taught *in context* to ensure greater comprehension. The best way to prepare students for the WKCE-CRT is to combine the assessment frameworks with ongoing instruction and assessment.

The two diagrams below are intended to help encourage discussion among educators about local curriculum, state standards, and the framework knowledge and skills assessed at one grade that must be part of the curriculum prior to the assessed grade.

Suggested relationships among the Wisconsin Model Academic Standards, academic assessment frameworks, and local curriculum, instruction, and assessment should exist. Solid arrows indicate direct influence, and dotted arrows indicate indirect or recommended influence.



Another way to use the assessment frameworks is as a basis for teachers to engage in multi-grade-level discussions. Since the test is administered in the fall, students should have an opportunity to acquire the knowledge and skills that will be assessed prior to the tested grade. Similarly, teachers will want to examine test results from the next-higher grade level for feedback on what is happening at their own grade level, as illustrated in the example below.



More information on the development and suggested use of the WKCE–CRT assessment frameworks can be found on the Web at http://dpi.wi.gov/oea/wkce-crt.html. For more information on the Wisconsin Model Academic Standards, please visit the DPI website at http://dpi.wi.gov/oea/standrds.html.

Chapter Test Characteristics and Use of Results

Test Format

The WKCE–CRT consists of two types of items, selected-response items and constructed-response items. For the reading test, approximately 90 percent of the score points at each grade level come from selected-response items, and the remaining 10 percent come from the constructed-response items. For the mathematics test, the percentage of score points from selected-response or constructed-response items varies; however, approximately 70 to 80 percent of the score points come from selected-response items and the remainder from constructed-response items.

Students will record their answers to selected-response items by filling in the appropriate bubble next to the correct answer in the test book. Students will write their answers to constructed-response items on the lines or in the space provided in the test book.

Test Design

The WKCE–CRT is designed with enough selected-response and constructed-response items to provide reliable scores for each reporting category. There may not be a test item for every sub-skill; rather, the items sample the content represented by the sub-skills. The tables on the following pages show the number of test sessions for each grade and content area, the approximate number of items per session, and the approximate number of minutes of testing time per session.

The WKCE–CRT uses an embedded field test design, which means that during the regular fall administration of the test, students complete an operational portion for each content area as well as completing field test sections. The operational portions of the test are used to report official test scores to The Wisconsin Department of Public Instruction. The field test items do not contribute to students' scores. If the new field test items are determined to have adequate psychometric properties, they are added to a pool of items that may be used on operational test forms in future administrations of the WKCE–CRT.

WKCE-CRT Operational Test Design

Grade	Content Area	Session	SR*	CR*	ER/ Prompt*	Minutes*
		1	20	2		50
	Danding	2	21	1		45
	Reading	3	14	1		40
		Total	55	4		135
		1	11	1		25
		2	10	2		30
	Mathematics	3	14	2		35
		4	20	1		35
		Total	55	6		125
10	Languaga	1	30			30
	Language Arts	2			1	30
	Alts	Total	30	0	1	60
		1	30	2		40
	Science	2	30	2		40
		Total	60	4		80
	Social	1	30	3		45
	Studies	2	30	2		40
	Studies	Total	60	5		85
	Total for (Grade	260	19	1	485

SR = **Selected Response**

CR = Constructed Response

ER/Prompt = **Extended Response or Prompt**

Test Blueprint

A test blueprint specifies how many selected-response and constructed-response items will measure the content objectives and sub-skills. Each year, the form of the test administered follows the blueprint, which helps ensure that test results can be compared from year to year because the content measured by the test remains stable.

Wisconsin educators participated in determining the test blueprints. The process of establishing the test blueprint focused on distributing the items and score points across the content objectives and sub-skills to reflect the relative emphasis placed on the knowledge and skills included in the assessment framework at each grade level. The distribution of items and score points for each reporting category may vary by grade level to reflect shifts in instructional emphasis across the grades.

The tables on the following pages show the reading and mathematics operational test blueprints for grade 10. The embedded field test items are in addition to the items listed below. The test design table above includes all items—operational and field test.

^{*}Item counts and session times are approximate and include field test items for reading, mathematics, and social studies. The WKCE–CRT Operational Test Design shown above is one example of one form. Additional forms may vary slightly.

Reading Test Blueprint

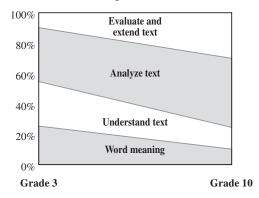
	Reporting Category		Grade 1	0
		SR	CR	Points
1	Determine meaning of words and phrases in context	8		8
1.1	Use context clues to determine meaning of words and phrases	7		
1.2	Use knowledge of word structure to determine meaning of words			
1.3	Use word reference materials to determine the meaning of words and phrases	1		
2	Understand Text	8		8
2.1	Demonstrate understanding of literal meaning by identifying stated information in literary text			
2.2	Demonstrate understanding of literal meaning by identifying stated information in informational text	8		
2.3	Demonstrate understanding of explicitly stated sequence of events in literary and informational text			
3	Analyze Text	25	2	31
3.1	Analyze literary text	7	1	
3.2	Analyze informational text	5	1	
3.3	Analyze author's use of language in literary and informational text	13		
4	Evaluate and Extend Text	14	2	20
4.1	Evaluate and extend literary text	4	2	
4.2	Evaluate and extend informational text	5		
4.3	Evaluate and extend the author's use of language in literary and informational text	5		
	Total for Test	55	4	67

Mathematics Test Blueprint

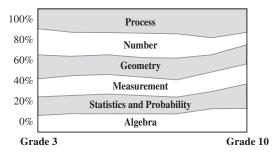
	Reporting Category		Grade 10				
		SR	CR	ER	Points		
A	Mathematical Processes	8	2		12		
A.a	Reasoning	5					
A.b	Communication						
A.c	Connections	2					
A.d	Representation						
A.e	Problem Solving	1					
В	Number Operations and Relationships	7			7		
B.a	Number Concepts	5					
B.b	Number Computation	2					
С	Geometry	9	1		11		
C.a	Describing Figures	5					
C.b	Spatial Relationships and Transformations	2					
C.c	Coordinate System	2					
D	Measurement	9	1		11		
D.a	Measurable Attributes	1					
D.b	Direct Measurement	1					
D.c	Indirect Measurement	7					
E	Statistics and Probability	10		1	14		
E.a	Data Analysis and Statistics	5					
E.b	Probability	5					
F	Algebraic Relationships	12	1		14		
F.a	Patterns, Relations, and Functions	5					
F.b	Expressions, Equations, and Inequalities	6					
F.c	Properties	1					
	Total for Test	55	5	1	69		

The graphs below provide visual representations of approximate item distribution according to reporting category for both the reading and the mathematics portions of the WKCE–CRT.

WKCE-CRT Reading Assessment Blueprint



WKCE-CRT Mathematics Assessment Blueprint



Use of Test Results

The results of the WKCE–CRT are used by the Department of Public Instruction for accountability measures for schools and districts, as required by state and federal laws. Districts and schools will receive a variety of score reports that will provide information helpful in evaluating the effectiveness of instruction and to plan curriculum and instruction. It is important to remember that the WKCE–CRT samples the content domain and is not an exhaustive assessment of reading and mathematics content concepts and skills. Therefore, when evaluating instructional programs and the performance of individual students, it is important to consider other sources of information in order to have a complete picture of the student, the educational program, the school, or the district.

When used in conjunction with other measures of achievement, such as classroom observations and teacher-developed tests, the WKCE–CRT can provide valuable information about the progress of individuals and groups of students, as well as the effectiveness of educational programs.

State and federal laws require the annual review of school performance to determine academic student achievement and progress. Annual review of school performance required by the federal No Child Left Behind Act (NCLB) is based on the school's *Test Participation*, the *Other Indicator* required (Graduation or Attendance rate for the *All Student* group), and the proficiency rates on the academic indicators, Reading and Mathematics. The proficiency rates on the WKCE–CRT and *Wisconsin Alternate Assessments* (both for English language learners and students with disabilities) are based on the test scores of students enrolled in the school for a full academic year (FAY). The overall goal of NCLB is for all Wisconsin students to attain the "Proficient" or "Advanced" levels in Reading and Mathematics by the year 2014. For more information about Adequate Yearly Progress (AYP), see the DPI website: http://dpi.wi.gov/oea/accounty.html.

Chapter 4

Reading

Reading Passage Characteristics

The reading passages on the WKCE–CRT are primarily intact, previously published passages presented in formats that include graphics such as photos, drawings, and illustrations. All information needed for a correct response will be included in the passage(s). Knowledge acquired in another content area will not be required to understand the information in the passage.

There are three types of reading passages on the WKCE–CRT: literary texts, informational texts, and everyday texts. Literary passages include prose and poetry; prose includes both fiction and nonfiction text. The table below gives examples of the specific types of texts that may appear on the WKCE–CRT at given grade levels.

Grade Level	Literary Text (Prose and Poetry)	Informational Text	Everyday Text
3-4	Realistic fiction, animal stories, poetry, drama, folktales, fables, biography	Nonfiction trade book excerpts, magazine articles	Charts, schedules, menus, tickets, product labels, safety notices, school-related texts, simple instructions
5-6	Realistic fiction, poetry, drama, biography, autobiography, historical fiction, myths	Magazine, textbook, and newspaper articles, government documents	Charts, schedules, simple forms, applications (for example, camp), product labels, safety notices, simple instructions
7-8	Short stories, novel excerpts, poetry, drama, biography, autobiography	Magazine, textbook, and newspaper articles, government documents, historical papers, reports, manuals, reviews, editorial cartoons	Charts, schedules, forms, timelines, applications, product use or warning labels, safety notices, technical instructions
10	Short stories, novel excerpts, poetry, drama, biography, autobiography	Articles, brochures, editorials, essays, memoirs, speeches, reviews, interviews, critiques	Charts, schedules, forms, timelines, applications, coupons, consumer product labels or information, product use or warning labels, safety notices, technical instructions, brochures, advertisements, warranties, trouble-shooting guides

Number of Passages

The WKCE–CRT reading test will consist of at least six and not more than eight reading passages. Each type of reading passage will be represented in the WKCE–CRT. Each version of the test will also include one long and one short literary prose passage, as well as one long and one short informational passage. The table below shows the distribution of reading passages that contribute to students' scores by reading passage type and by length. In addition to the six passages identified in the table below, there will be at least two field test reading passages.

Type of Reading Passage	Number of Passages
Literary Prose	1 short
	1 long
Poetry	1
Informational Text	1 short
	1 long
Everyday Text	1
Minimum Total	6

Passage Length

Passage length varies according to grade level, though at any given grade level there will be a combination of short and long passages.

		Wo	rds		Pages (Test Book)	
	Litera	Literary Text Informational Text				
Grade	(Prose an	nd Poetry)				
Level	Short	Long	Short	Long		
3-4	300-600	300-600 900-1200		700-1000	Up to 1 page	
5-6	350-700	900-1500	350-700	800-1200	Up to 1 page	
7-8	400-800	1000-1500	400-800	900-1500	Up to 2 pages	
10	400-800	1000-1500	400-800	900-1500	Up to 3 pages	

Paired Reading Passages

The WKCE–CRT reading test will include paired reading passages that share common themes, topics, or settings. The inclusion of these paired passages allows for the creation of selected-response and constructed-response items that focus on the students' ability to make comparisons across texts, or to summarize or synthesize information across texts. These passages will also be addressed independently of one another.

For these paired passages, any combination of reading passages types may appear on the test. Possible pairings include a literary prose passage paired with either a poem or an everyday text; an informational passage paired with either an everyday text or a poem; a literary prose passage paired with an informational text. Paired passages are grouped together in a single session; they do not span sessions.

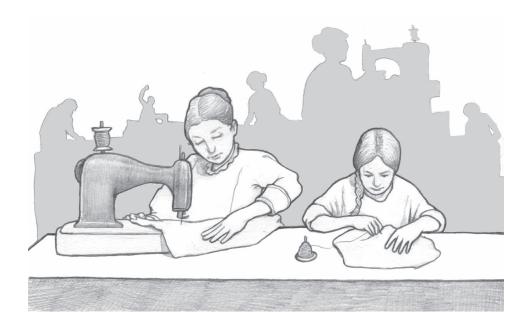
Selection of Reading Passages

The materials selected for the reading test are intended to include a range of age-appropriate and engaging passages representing a variety of texts that deal with a variety of subjects. Passages are chosen that address grade-appropriate topics to which students can relate and which include a range of length and reading difficulty. The aim is to select passages that are accessible to all students.

Furthermore, passages are selected with an eye toward providing a genderand culturally-rich balance of topics. The intention is to represent minority experiences and authors, provide an appropriate balance of male and female characters and authors, and include topics regarding students with special needs as well.

SAMPLE PASSAGES

Long Literary Passage



Threads: A Family Tale

by Elyse Green

Note: The following is an excerpt from the beginning of a historical novel. It takes place in the early part of the 20th century.

"Anton! Let your sister finish her breakfast. We must leave in ten minutes. Please eat, Mila, hurry."

I patted my brother on his curly head and he scurried to our grandmother across the room. "Oh, Mama, he only wants to play a little before I am gone all day," I said through a bite of porridge.

"Your father will be home in an hour," my Baba¹ chimed in. "He always plays with him a bit before he goes to bed." My heart ached at the mention of my father. I missed him so. Since I started working our family was only together in passing; he worked the night shift at the steelworks seven days a week. I could not dwell on it. I stuffed a hard crust of rye in my lunch pail and rose to fetch my cloak.

Baha.	grandmother

Long Literary Passage (continued)

We were lucky. I was told this constantly, and felt it, too, as my mother and I made our way through the snowy streets of our little country town. When I was too young to remember, my family had come to New York from Russia. They had never intended to stay in the city, but my father fell ill on the crossing. My mother, a brilliant seamstress, had taken on work in a factory downtown to support the family until he was well enough to move on. We had moved south to Pennsylvania two months later.

"The work we have here, Mila, slavabawgu, it is a gift," she told me on my twelfth birthday, the day I started accompanying her to the factory. "The girls in the city die of neglect and overwork. There is no air in those places, only the smell of sweat."

Mama said J.D. Granger Textiles & Garmentry was as good an employer as an immigrant could expect to find. Mr. Granger was honest and kind, if not indulgent. He paid us



fairly, and on time. We were salaried, which meant that Mama got \$6 and I got \$2 each week no matter how much we worked. Girls in city factories were obliged to do piecework, meaning they were paid per each garment they produced. This way, a girl sewing jackets—which are complicated and take a lot of time—would make half as much as a girl making skirts, which are simple. Mama said that in the city the corrupt factory foremen would give the easy tasks to their favorites. It was a terrible way to have to make a living, and not much of a living, at that.

I kept those poor women in my thoughts as we walked down Main Street toward the river. I could feel the bitter cold through the toes of my boots, thin with wear and nearly too small. I hoped the extra money I was bringing to the family now might mean I could get new boots next winter before I outgrew my old ones completely and had to cut the toes out like so many of the girls at school.

We crossed the bridge and turned downstream toward the low, long factory building. Already I could see a line had formed outside. Mama said "Hello! Zdrastvuche!" to a few of the women as we joined them, but she avoided conversation, as she spoke little English. Having been to the public school for three years, I was a great help to her in this regard.

Promptly at a quarter to seven, Mr. Granger came out and began ushering us all inside. He was a very tall man with dark hair and smiling green eyes. He always bent down to speak to me as though I were important.

"Good morning, Mila, Mrs. Komorov! Tomorrow is Sunday, Mila. What does that mean?"

"Our day of rest, sir!" I chirped.

Long Literary Passage (continued)

"Yes. And your wages today at closing. So work hard this day and be thankful tomorrow!"

"Yes, Mr. Granger, I will sir." He tousled my hair and winked.

Inside, we hung our cloaks and deposited our lunch pails beneath them. The apprentice, Mr. Langford, called us by name and handed us our "stints" for the day—that is, the stack of garments we were expected to finish by 7 p.m. Mama's would be twenty pieces or so; mine would be five, because I sewed by hand. At fifteen I would be old enough to work the machines, but at thirteen, I was only allowed to hand-stitch beside my mother. This was one of Mr. Granger's many great kindnesses to us, she said, to allow me to work this way for less pay. In the cities, girls were on the machines at nine or ten, their hands so small and the lighting so bad that their fingers often caught and were punctured clean through.

Mama and I were feller² hands. It was our job to finish and smooth the raw edges of seams inside the sleeve linings of men's jackets. It sounds tedious, but it was not so bad. When I'd left school to start working, my father had said to me that no job is humble when one does it well and takes pride in it. I tried to remember with each stitch that I was helping my family. It made the hours pass quickly.

There were twenty-four sewing machines in our factory, three rows of eight machines each. The first row was the cheeriest, next to the windows overlooking the river. Who sat there was determined by seniority as they received a good deal of the coveted morning sunshine. The other rows were lit by gas lamps, which I wished were brighter. Sometimes my eyes hurt from squinting so much of the day.

We took our places in the last row, Mama at the third machine from the end, and I behind her. I had to give her plenty of room because the machines ran on foot power. Using the pedal was so laborious her entire body would sway as she pumped it.

We set to work. The hours passed quickly as the whir and hum of the machines lulled us all into a steady rhythm. As each garment was finished, we would call out to Mr. Granger and Mr. Langford and one of them would come to inspect the stitches for straightness and regularity. If anything was out of place, the seams were pulled and we started all over again. This had happened to me several times in my first week at the factory. I had not let it happen since.

During our half hour lunch break in spring and summer we were allowed outside for twenty minutes. Another stroke of luck according to my mother, for "in New York the bosses, they keep the doors locked all day!" But in the winter, the women would gather around the coal stove to eat and socialize. Mama and I ate our rye and enjoyed the warmth. I kept quiet, so she could rest. By lunchtime she was usually very tired. There were a few other girls my age whom I talked to on occasion, but Mama always sat silently by the stove. I could tell her back ached from pedaling so hard on her stool. I did wish Mr. Granger would give us proper chairs with backs to them. By the end of the day, I had finished my five jackets. Mama had finished her twenty plus three more. For that, she would get an extra fifteen cents the following week.

²feller: a person who finishes sewing a seam

Long Literary Passage (continued)

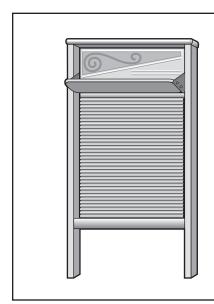
"Choodnay, Mama, you are a miracle!" I hugged her as we bundled up for the walk home. She felt so thin and frail to me. She smiled, but the dark circles under her eyes cast long shadows on her face. She would sleep all day Sunday as usual, and let Baba and me do the cooking.

Letters "A" through "J" felt like they took longer and longer with every passing week: "Abbott, Alice..." "Baker, Johanna..."

At last, Mr. Langford called our names. "Komorov, Valeriya. Komorov, Mila..." We walked to the door and Mr. Granger handed us our wages. "Have a pleasant Sunday, ladies."

It was eight o'clock and already dark outside. I squeezed my mother's hand and stared down at my boots as we walked. Suddenly I did not care that they no longer protected my feet from the cold. I would go barefoot if I could make enough money for the both of us so that she would not have to work anymore. Still, I felt bright and sunny inside as I always did on Saturdays. We were going home to family, to a warm house and a warm meal, and as long as we worked, we would not freeze or starve as we nearly had so many times in the past. Blagadarnee, I thought. I was grateful.

Short Informational Passage



Lightening the Load:

Bringing Laundry into the Mechanical Age
by Elyse Green

Imagine you lived at any other period in history—ancient Rome perhaps, or the Wild West. Certainly most of the luxuries we enjoy today (car and air travel, cable television!) would not have been available to you. But what about the basics? Think of all the appliances and devices that we've come to depend on in our everyday lives. Clearly, before people learned how to harness electricity, life was a lot more difficult. Even the simplest household tasks required enormous effort. This was particularly true of doing laundry!

Before washing machines, people used wet sand as an abrasive to free the dirt from their clothing. If you had a stream or other moving water source nearby, you would spend hours pounding stains out of your clothes on rocks, then let the rushing water carry the dirt away. It was even worse for those who had to pump their water or draw it up from wells: One wash—with one tub of boiling water and one tub of rinse water—could use up to 400 pounds (50 gallons) of water! The water would have to be moved from its source to the stove, then to a washing tub in manageable bucket loads. And don't forget, you'd have to scrub, rub, wring, and lift all your water-laden articles—possibly hundreds of pounds in a single wash. The load of laundry that takes an hour or two today took days to even a week or so before the invention of the washing machine.

The first washing device, the scrubbing board, was invented in 1797. You have probably seen one, perhaps used as a musical instrument; it was a simple wooden (or later, metal) board with a ribbed surface to rub your clothes against. While it helped to remove dirt, it solved none of the other problems of doing laundry.

Imitating the motion of the human hand on the washboard, the first real washing "machines" were patented in the 1840s. These models were improved upon throughout the latter half of the 19th century, with ever more elaborate arrangements of gears and wheels to make their manual operation easier.

Short Informational Passage (continued)

As the Industrial Revolution kicked into high gear, inventors sought to make washing machines truly "automatic." Steam- and gasoline-powered models appeared first, since the problem of mixing electricity and water was dangerous and troubling. However, as more and more homes were wired for electricity, it became clear that the electric washer was the wave of the future. Fully electric models first appeared in the early 20th century, with their motors enclosed in ventilated housing to prevent water from coming into contact with the motor's wiring.

In 1907, a U.S. company became the first to introduce "agitator" technology, which forced water through clothes with a moving tub. This is the most commonly used system today, although the washing machine underwent another half-century of improvements: Gradually copper, then sheet metal, then steel replaced wooden tubs. In the 1940s, a timing device was added which allowed the washer to be operated unsupervised for a set period of time. Manual wringers remained attached to the outside of washing machines until well into the 1950s, when



An early version of a washing machine, this model has an electric motor as well as a manual wringer.

the spin cycle was invented. In 1957, another American company introduced a machine with buttons controlling wash temperature and rinse temperature. This model was the forerunner of the more user-friendly machines of today.

So next time you do your laundry, or accept a fresh, clean bundle from Mom or Dad, thank them and be grateful. Life without the modern washing machine would be a lot harder . . . and smellier!

Closet Clues:

Care Labels and Your Clothes

Your favorite sweater shrank, your new pants puckered, and the colors in your designer shirt ran. You're furious.

Don't toss the clothes out just yet. If you followed the cleaning instructions on the care labels, you can return the garments and ask the retailer for an exchange or a refund.

Under the Federal Trade Commission's Care Labeling Rule, manufacturers must tag their clothing with at least one safe cleaning method. Garments sold without a care label—or with inaccurate cleaning instructions—may violate the Rule. Beginning July 1, 1997, manufacturers may use certain care symbols in place of words on labels. To help consumers understand the new symbols, the FTC says manufacturers must include written explanations of those symbols on hang tags or elsewhere on garments for the next 18 months.

This brochure explains the Rule, the new care symbols, and what to do if your clothes end up damaged—even after you've followed the care instructions.

When Is a Label Required?

Care labels are required on most textile clothing. They are not required on clothing made primarily of suede or leather, footwear, items for the head and hands—such as hats and gloves—or on household items like sheets and towels. However, many manufacturers of these items provide care information voluntarily.

The care label must be attached firmly to a garment, easy to find, and readable for the useful life of the garment. Some garments have more than one piece. If the pieces are sold separately—or if they require different care—each must have its own label. Otherwise, only one label is necessary.

_	_	_	_	_	_	_	_
	Wha	at Sh	ould	a La	bel S	Say?	
_	—	—	—	—	_	—	—

In addition to giving one safe cleaning method, care labels must list any necessary warnings about that cleaning method. For example, the label must say whether any step of the care method—washing, bleaching, drying, ironing, or dry-cleaning—could harm the garment, or other items cleaned with it.

Everyday Passage (continued)

Does Washable Also Mean My Garment Can Be Dry-Cleaned?

Not necessarily. Only one method of safe care has to be listed—regardless of how many other safe methods could be used. The label does not have to warn about unsafe cleaning methods. For example, clothing labeled "washable" may not dry-clean well.

What About Trim?

Care instructions apply to all permanently attached parts of the garment, such as buttons, lining, or decorative trim. Labels that say "Dry-Clean Only, Exclusive of Decorative Trim" do not meet legal standards because they don't explain that the trim must be removed before the garment is cleaned, or give a separate care method for the trim.

What If I Have Problems?

If you followed the washing instructions and your red-and-white shirt is now pink or if your garment was dry-cleaned according to the care instructions and is damaged, return it to the retailer and ask for an exchange or refund. If the retailer won't cooperate, ask for the manufacturer's name and address, and write to the company. In your letter, describe the garment and list information from the labels and tags. Estimate how many times you've washed the garment or had it dry-cleaned. Include the full name and address of the retailer.

You also can contact the FTC by writing to: Consumer Response Center, Federal Trade Commission, Washington, DC 20580. Although the FTC can't resolve individual disputes, the information you provide may indicate a pattern of law violations requiring action by the Commission.

The FTC also would like to know if you've purchased clothing without a care label. Please include the name and address of the retailer and the manufacturer.

Can I Remove the Label?

Care labels must be attached when you buy clothing. The recommended care could influence your purchasing decision. For example, you may want to avoid "Dry-Clean Only" items if you're concerned about cleaning costs.

Everyday Passage (continued)

Although you can remove a care label, you risk losing important information about the proper care of your garment.

				_	_		_
	F	or M	ore I	nfori	matio	on	
			—			—	

You can file a complaint with the FTC by contacting the Consumer Response Center by phone: 202-FTC-HELP (382-4357); TDD: 202-326-2502; by mail: Consumer Response Center, Federal Trade Commission, Washington, DC 20580; or through the Internet, using the on-line complaint form. Although the Commission cannot resolve individual problems for consumers, it can act against a company if it sees a pattern of possible law violations.

Literary Passage: Poetry

Unfolding Bud

by Naoshi Koriyama

One is amazed

(1)

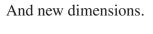
By a water-lily bud

Unfolding

With each passing day,

Taking on a richer color

(5)







One is not amazed,

At a first glance,

By a poem,

Which is as tight-closed

(10)

As a tiny bud.

Yet one is surprised

To see the poem

Gradually unfolding,

Revealing its rich inner self (15)

As one reads it

Again

And over again.



Sample Reading Items: Selected Response

Reading items on the WKCE–CRT are aligned with the Wisconsin assessment frameworks. Items can be divided into four categories corresponding with the various reporting categories.

1. Determine the meaning of words and phrases in context

Items measuring reporting category 1 will require students to use context clues, word structure, and reference materials to determine the meaning of unknown words and phrases.

The item shown here requires students to determine the meaning of an above grade-level phrase.

(from "Closet Clues")

Read this sentence from the passage.

Labels that say "Dry-Clean Only, Exclusive of Decorative Trim" do not meet legal standards because they don't explain that the trim must be removed before the garment is cleaned, or give a separate care method for the trim.

The underlined phrase means

- A)* not including
- B) carefully with
- C) not forgetting
- D) especially with

This item measures students' ability to use the larger context of a passage to determine the meaning of an unknown phrase.

(from "Threads: A Family Tale")

Read this sentence from the passage.

They had never intended to stay in the city, but my father fell ill on the crossing.

In this context, on the crossing means

- A)* during their ocean voyage from Russia
- B) during their journey south to Pennsylvania
- C) because of his anger at working conditions in New York
- D) because of having to walk through Manhattan every day

1. Determine the meaning of words and phrases in context (continued)

Students will also be required to determine the meaning of figurative language in context. This item requires students to make use of the immediate context in which the underlined phrase appears.

(from "Closet Clues")

Read this sentence from the passage.

The care label must be attached firmly to a garment, easy to find, and readable for the useful life of the garment.

The underlined phrase means

- A) until the garment fades
- B)* for as long as the garment lasts
- C) for as long as garment is in fashion
- D) until the owner gives the garment away

Other items will replicate dictionary entries in order to measure students' ability to choose the appropriate meaning of multiple-meaning words found in context.

(from "Threads: A Family Tale")

Read this dictionary entry.

dwell v. 1. To remain for a while. **2.** To live as a resident. **3.** To keep one's attention directed. **4.** To speak or write insistently.

Now read these sentences from the passage.

Since I started working our family was only together in passing; he worked the night shift at the steelworks seven days a week. I could not dwell on it.

Which of these is closest in meaning to <u>dwell</u> as it is used in the passage?

- A) definition 1
- B) definition 2
- C)* definition 3
- D) definition 4

2. Understand text

Items measuring reporting category 2 will ask students to identify stated information found in passages, locate explicitly stated information found in a given passage, and show an understanding of explicitly stated sequences in a text.

The item shown here measures students' ability to locate specific information in a given text.

(from "Closet Clues")

What information must be provided on every care label?

- A) the size of the garment
- B)* one safe cleaning method
- C) identification of the fabric
- D) where the garment is made

Items will also require students to demonstrate an understanding of explicitly stated sequences in a given passage.

Sequence items may appear in the form seen here. They may also include a graphic representing an incomplete sequence that students must complete by selecting the proper answer choice.

(from "Lightening the Load: Bringing Laundry into the Mechanical Age")

Which of these events happened last?

- A) Copper tubs replaced wooden tubs.
- B) Machines were able to run unsupervised.
- C)* The spin cycle replaced the manual wringer.
- Steam-powered washing machines were introduced.

2. Understand text (continued)

Students may also be required to recognize the proper sequence of ideas in a given text or to locate where in a given passage a particular piece of information might be found.

(from "Unfolding Bud")

Which lines from the poem support the idea that a poem does not seem to be anything special the first time it is read?

- A) lines 1–4
- B)* lines 7–9
- C) lines 12–15
- D) lines 16–18

3. Analyze text

Items measuring reporting category 3 will require students to identify main ideas and themes, summarize events, and make inferences about various aspects of a text.

The item shown here measures students' ability to identify the main idea of a given passage.

(from "Unfolding Bud")

What is the main point the speaker of the poem is making?

- A) A poem needs to be nurtured just like a flower.
- B) Poems contain secret meanings put there by the poet.
- C)* A poem can be understood better after reading it several times.
- Poems written long ago have new meanings for today's reader.

This item measures students' ability to identify important themes in a given text.

(from "Unfolding Bud")

Which of these <u>best</u> expresses a universal theme found in this poem?

- $A)^*$ the search for meaning
- B) the search for the ideal life
- C) the human struggle to conquer nature
- D) the struggle between illusion and reality

3. Analyze text (continued)

The skill measured in this item is the ability to summarize key aspects of a passage.

Items such as this may also require students to choose the best overall summary of a given passage.

(from "Threads: A Family Tale")

What effect do Mama's stories about New York have on Mila?

- A)* She feels fortunate to be somewhere else.
- B) She wishes her family had not left New York.
- C) She is frightened for the factory workers in New York.
- D) She feels anger toward her mother's previous employer.

Some items, such as the one shown here, may also require students to analyze implied comparisons or contrasts found in the text.

(from "Lightening the Load: Bringing Laundry into the Mechanical Age")

Doing laundry before the invention of the washing machine was difficult because

- A) people had less time
- B) there was no detergent
- C)* it had to be done by hand
- D) it required running water

Other items will ask students to analyze cause and effect relationships. This item requires students to isolate a specific piece of information in the text and use it to make an inference.

(from "Lightening the Load: Bringing Laundry into the Mechanical Age")

Why did inventors first produce washing machines that ran on gasoline or steam rather than electricity?

- A) Gasoline and steam were less expensive.
- B)* Electricity plus water can result in a deadly shock.
- C) Electricity plus water uses twice as much detergent.
- D) Gasoline and steam were more environmentally friendly.

3. Analyze text (continued)

Items such as this will measure students' ability to draw conclusions based on information provided in the text.

(from "Threads: A Family Tale")

Mila no longer attends school because

- A) she does not speak English
- B)* her family needs extra income
- C) she takes care of her grandmother
- D) her family does not value education

Students may also be asked to synthesize information within a given passage in order to make inferences.

While this item is similar to the previous item, the item shown here requires students to deal with a wider range of information.

(from "Closet Clues")

Which of these items requires more than one care label?

- A) a pair of wool gloves with leather palms
- B) a jacket with a detachable hood made of the same fabric
- C) a two-piece silk dress that can be washed or dry cleaned
- D)* a raincoat with a removable lining that requires dry cleaning

3. Analyze text (continued)

Many items will ask students to analyze the use of language in a given passage. This item addresses students' ability to analyze an author's—or, in this case, a narrator's—use of rhetorical devices.

Items such as these may appear in either selected-response or brief constructed-response formats.

(from "Threads: A Family Tale")

Read this sentence from the passage.

This way, a girl sewing jackets—which are complicated and take a lot of time—would make half as much as a girl making skirts, which are simple.

Mila interrupts her narration in order to

- A)* explain an important detail
- B) make a humorous comment
- C) complain about a difficult task
- D) illustrate a point with flowery language

This item focuses on students' ability to identify an author's purpose in writing a given text.

(from "Closet Clues")

This passage was most likely written to

- A) inform manufacturers about their responsibilities
- B) warn store owners about overcharging customers
- C) let dry cleaners know how to clean certain garments
- D)* help consumers understand new legal requirements

3. Analyze text (continued)

This item measures students' ability to analyze an author's use of literary devices, in this case, metaphor. Students will not be expected to label literary devices.

(from "Unfolding Bud")

The speaker uses the image of a water lily in order to draw attention to the

- A) structure of the flower
- B) hidden secrets of nature
- C) writing skills of the poet
- D)* levels of meaning of a poem

Other items will measure students' ability to make inferences about an author's tone. Students, however, will not be expected to recognize the term, "tone."

(from "Unfolding Bud")

The speaker's attitude toward poetry is best described as

- A) tolerant
- B) mocking
- C) indifferent
- D)* appreciative

4. Evaluate and extend text

Items measuring reporting category 4 will address students' ability to make connections between texts (or between text and self or text and world), make predictions, distinguish between important and unimportant details, identify an author's purpose, and evaluate the author's use of language.

Items such as this will require students to make connections between paired passages. These items will either appear in selected-response or brief constructed-response format.

(pairing "Threads: A Family Tale" and "Lightening the Load: Bringing Laundry into the Mechanical Age")

Which of these ideas is addressed in both "Threads: A Family Tale" and "Lightening the Load?"

- A) Machines make life much easier.
- B) Clothing was more elaborate 100 years ago.
- C) Electricity is our most efficient source of energy.
- D)* Doing things by hand requires a great deal more time.

Students may also be required to distinguish between fact and opinion in a given text.

(from "Lightening the Load: Bringing Laundry into the Mechanical Age")

Which of these is an opinion?

- A)* Clearly, before people learned how to harness electricity, life was a lot more difficult.
- B) Before washing machines, people used wet sand as an abrasive to free the dirt from their clothing.
- C) Imitating the motion of the human hand on the washboard, the first real washing "machines" were patented in the 1840s.
- D) As the Industrial Revolution kicked into high gear, inventors sought to make washing machines truly "automatic."

Reading Assessment Rubrics

General Rubrics for Brief Constructed-Response Items

3 points

- The response demonstrates thorough understanding of the reading concept embodied in the task.
- The response is accurate, complete, insightful, and fulfills all the requirements of the task.
- Necessary support and/or examples are included.
- Information is clearly text-based.

2 points

- The response demonstrates partial understanding of the reading concept embodied in the task.
- The response is accurate and fulfills most of the requirements of the task.
- Necessary support and/or examples may not be complete or clearly textbased.

1 point

- The response demonstrates an incomplete understanding of the reading concept embodied in the task.
- The response provides some information that is text-based, but does not fulfill the requirements of the task.
- Information provided is too general or too simplistic.
- Necessary support and/or examples may be incomplete or omitted.

O points

- The response demonstrates no understanding of the reading concept embodied in the task.
- The response is inaccurate, confused, or irrelevant.
- The student has failed to respond to the task.

Sample Reading Items: Constructed Response

General Information on CTB/McGraw-Hill Handscoring Facilities and Processes

Student answers to the constructed-response items included on the WKCE–CRT are scored at one of CTB/McGraw-Hill's handscoring facilities. CTB maintains four full-time handscoring centers located throughout the country. These centers include sites in Salinas, California; Mather, California; Indianapolis, Indiana, and Delran, New Jersey.

CTB uses an imaging handscoring system to present images of scanned test books to trained readers who assign scores for constructed-response items. After training, readers view scanned assessment images on high-quality 19-inch workstation monitors. Images of student responses are automatically routed to two or more readers when required, and images of specific subsets of test items can be routed to designated groups of readers trained to score those items.

Scoring supervisors direct and organize the assessment process and train team leaders and readers. Scoring supervisors have extensive experience as team leaders prior to their selection and are subject-area experts in the content that they supervise and train.

Team leaders are assigned based on their education, scoring experience, and previous success. Team leaders are selected from a pool of highly successful readers. In addition to demonstrated skill and consistency in scoring, team leaders are selected for their interpersonal skills and organizational abilities.

Readers must have at least a bachelor's degree to be able to score for CTB. In addition, about 25% have master's degrees or higher; 40% have taught in schools and/or universities, and approximately 33% have degrees in education. Checks are in place to ensure that readers are qualified to score the specific subject matter at each of the corresponding grades assigned to them for a project.

Rangefinding Meetings

Rangefinding meetings are held prior to any scoring of constructed-response items. These meetings involve CTB staff from both handscoring and content, curriculum and assessment specialists from the Wisconsin Department of Public Instruction, as well as a group of Wisconsin teachers with expertise in the appropriate subject matter and grade levels under consideration. The purpose of these meetings is to create clear guidelines for assigning each score point for each constructed-response item. This collaboration is critical in order to ensure that scoring interprets state-approved rubrics in a manner that is consistent with the philosophy, curricula, and pedagogy of teachers in the state of Wisconsin. The foundation of future operational scoring is

created at these rangefinding meetings, as the committee communicates scoring decisions and philosophies associated with each item.

In preparation for rangefinding, a small group of hand-selected CTB team leaders and supervisors sort through a representative sample of student responses looking for a variety of response quality. The scoring supervisor accesses images of scanned student responses and creates either an electronic file of image responses or print responses to assure that the initial review is from a statewide, representative sample. The scoring supervisor reviews constructed-response questions, the state-approved rubrics, and drafted itemspecific scoring guides for the items with team leaders. Team leaders sort responses into "high," "medium," and "low" folders, making notes on any unique or varied responses. The scoring supervisor reviews the selections, focusing on the noted unique or varied responses and narrowing down possible score points. Master sets are then created for anchors, training sets, qualifying sets, and horizontal papers. These master sets are used during the rangefinding meeting.

During the rangefinding meeting, CTB participants create detailed notes, refine item-specific scoring guides, and listen carefully to the discussion and resolutions on scoring each item to ensure that they completely understand scoring decisions and philosophy and can effectively communicate these decisions and philosophies to reader staff. Following the rangefinding meeting, the scoring supervisor uses these detailed notes and refined itemspecific scoring guides to annotate the papers included in master sets.

Maintaining Reliability During the Scoring Process

CTB has multiple processes in place to control both inter-rater reliability (scoring consistency among different readers) and intra-rater reliability (scoring consistency for each reader from day to day).

Intra-rater Reliability

Once a reader has been qualified to score constructed-response items at a specific grade/content area, the daily process of checking that reader's accuracy begins. Calibration sets of pre-scored papers (check sets) are administered daily to the team leaders and readers to monitor scoring accuracy and to maintain a consistent focus on the established rubric and guidelines. Electronic imaging makes it possible to intersperse the check set papers so that readers do not know that a check set is being administered. Readers whose check set scores regularly fall below the qualifying level are removed from live scoring and are given additional training and another qualifying round. Readers unable to re-qualify are dismissed.

Inter-rater Reliability

CTB uses several means of establishing and maintaining inter-rater reliability. First is the implementation of a qualifying round of training

papers, in which all trainees must obtain a minimum rate of score agreement with pre-established scores assigned by the training materials development team. A second measure, known as the "read-behind," involves a table leader checking a sample of readers' scores. Guidelines for score agreement on read-behinds are developed in advance, and when a reader's score agreement on this measure is below the minimum, the table leader retrains the reader. The read-behind helps maintain the consistency of accurate scoring by readers. It also helps to quickly spot readers who are inconsistently applying the scoring criteria. The third measure is the use of validity check sets during the scoring of actual "live" student responses. This measure looks for score agreement (accuracy), and is used to identify readers or teams that have drifted from the scoring consensus established during reader training. Where check set results are below the minimum standard, readers are retrained before they are permitted to resume live scoring.

Brief Summary of Scoring Terms

Anchor Papers: Anchor papers are carefully selected student responses that are chosen to represent a solid mid-point of the range of a particular score point. Anchor papers, along with annotations, are selected and/or approved during rangefinding meetings.

Check Sets: Sets of pre-scored papers that are administered daily to team leaders and readers during live scoring to monitor scoring accuracy and maintain a consistent focus on the established rubrics and guidelines.

Horizontal Training Rounds: In the horizontal training rounds, readers receive more in-depth training for each item. One of the major purposes of horizontal training papers is to show readers the range of each score point.

Qualification Papers: Qualification papers are used to validate evaluators' assessment skills before live scoring begins. The scoring philosophy demonstrated in the rubrics and rangefinding documents, as well as the most important scoring issues covered in the training rounds, are represented in the qualifying papers.

Scoring Guides: The scoring guides are essentially the major scoring resource for all readers. They contain the constructed-response question, the state-approved rubric, and item-specific criteria for each score point. Accompanying the scoring guides are the annotated rangefinding papers.

Training Sets: Training sets give the readers the practice they need in accurately applying the scoring guide. Training set papers, along with annotations, are selected and/or approved during rangefinding meetings.

Validity Check Sets: Validity check sets are similar to qualification sets, except that they are administered during the scoring of actual "live" responses as an on-going check of readers' assessment skills.

Providing Support for Constructed-Response Items

The general rubrics for constructed-response items specify that student responses must provide necessary support or examples that are clearly text-based in order to receive full credit. Text-based support is that which shows that a student's response interacts substantially and meaningfully with specific aspects of a given passage.

Direct quotation from the passage is the most obvious example of support that is clearly text-based. However, quotations that are chosen poorly or haphazardly may do little to demonstrate a student's understanding of a given text. Also, relevant quotations not accompanied by necessary explanation can often only give a general indication of the direction of a student's thinking. In their responses, students must not only provide relevant information from the text, but they must also demonstrate that they understand *why* the information is relevant.

Though direct quotation can serve as excellent support in a response, students need not quote directly from the passage in order to earn full credit. Accurate paraphrasing or characterization of elements in the passage can be sufficient to show that a response is firmly rooted in the particulars of the text. In many cases, students' ability to synthesize important information serves as a better indication of comprehension than does the use of verbatim quotation.

(from "Threads: A Family Tale")

Why is "Threads: A Family Tale" a good title for the passage? Be sure to thoroughly support your answer using examples and details from the text. Write your answer on the lines below.

3-Point Response #1

The title "Threads: A Family Tale" is an appropriate title

because it is symbolistic to the cause the author is proposing.

The title represents how by the use of working through sewing,

a family is brought together. The quote "I would go barefoot

if I could make enough money for the both of us..." shows the

emotion of concern for the family's benefit coming first. Also,

the daughter not minding work to support her mom is detail.

This response addresses both the metaphorical and literal dimensions of the title, demonstrating an insightful, full understanding of the concept. Furthermore, the response is supported by relevant, direct quotation from the text.

The title, "Threads: A Family Tale," is a good title for this

passage because it justifies the passage. It makes the reader

try to connect the story with the title because one would think

of threads either woven together, thrown in a ball, or separately.

The family part of the title would illustrate that the threads

would be woven together. This family is woven like threads are in

a blanket. The little girl works with her mother to keep the family

together. The family members each have a job and the rest of

the family depends on the other like a blanket. If one thread

breaks then the blanket is torn. In closing, the title is a good

introduction to the passage.

This response shows a rather complete comprehension of how the title interacts with the passage, in terms of both its literal and metaphorical aspects. Though the student does not directly address the literal connection between the title and the passage, the response makes it clear that the connection is a given. The student's analysis of the title is also supported by textual detail.

2-Point Response #1

The title "Threads: A Family Tale" is good because the story is about a girl and her mother sewing in a factory to make a living.

They care very much about their family and they work hard for them so the title is appropriate in that way too.

This response notes the literal connections between the title and the passage, but does not address the metaphorical aspect of the title. The response also provides some generalized information from the text as support.

2-Point Response #2

"Threads: A Family Tail" is a good title for this passage because the story is about a family trying to make their way through life by sewing to earn income so their family can survive. It has a very good relation to the story.

This response also focuses on the literal aspects of the title, without delving into its symbolic resonance. The response makes limited but accurate reference to details from the text by way of paraphrase.

1-Point Response #1

It's a good title for the passage because it's about a family. Who was going to New York from Russia they where moving because of the job condiction. There was this girl Mila and her brother who moved with their grandmother & the 2 months later they moved to pennsyvania.

This response shows an incomplete understanding of the concept at hand, addressing the issue of family, but providing inadequate relevant support to indicate the student's thinking on the matter.

1-Point Response #2

It is a good title for the story because it explains what the mother, father, and daughter have to do to survive in the New place.

This response shows a limited understanding of the concept and provides no textual support.

(from "Threads: A Family Tale" and "Lightening the Load")

How do both "Threads: A Family Tale" and "Lightening the Load" address how life in earlier times was harder than it is today? Be sure to thoroughly support your answer using examples and details from the passage. Write your answer on the lines below.

3-Point Response #1

The first story shows life in earlier times was a lot harder
because you would have to work so hard in a factory with terrible
lighting, poor seating, simple machines and get only 6 dollars a
week. Not to mention how many hours people had to work to get
that money. Also, "Lightning the Load" shows how without modern
machines and electricity, just washing a shirt could have taken all
day back then. Now days are so much easier.

This response is thorough, well supported, and shows an excellent overall grasp of the concept.

"Threads: A Family Tale" and "Lightening the Load" both address the hard-working lives in the previous eras with the descriptions of the working life and the list of the improvement of the laundry machine. In "Threads: A Family Tale", the mother is always saying that they, her family, was lucky to be in their working environment. The reader, during the present era, would not believe that the family was lucky because of how life is now. The list of the way laundry was actually done by rubbing clothes against a board shows how hard life actually was. Now, people just through their clothes into a machine and press a button, but people then had to labor over every stain. People in the common era do not have to deal with that. The hardships of life in the earlier years was common to both passages.

This response approaches the question in a somewhat different way from the previous response, but it addresses the question in a complete manner and demonstrates a full understanding of the concept. Though textual support from "Threads: A Family Tale" is a little thin, the response still provides enough support to earn full credit.

2-Point Response #1

"Threads: A family Tail," and "Lightening the load" both address how life was much more difficult in the earlier years because back then everything was hand done and there were no machines to do work for you. Also, with the work being hand done, you would have to work a lot harder and things would get done a lot slower.

This response shows a rather complete understanding of the concept but provides very little textual support for the reading.

2-Point Response #2

In "Threads: A Family Tale" they didn't have sewing machines.

In "Lightening the Load" they didn't have washing machines.

This response gives a brief, largely accurate summary of key aspects from each text, but it does not make an explicit connection between the two or provide adequate textual support.

1-Point Response #1

They both are about job conditions and job experience. Lightening the load is about a invention of a washing machine detergent and A family tale is about this family and their job conduct. The about invention thing.

This response demonstrates an incomplete understanding of the two passages, particularly "Lightening the Load." Though the topic sentence hints at a possibly insightful reading of the passages, the response provides no relevant textual support for that reading.

1-Point Response #2

It was difficult to do things by hand since factories were bad places to work. You had to work carefully.

This response shows a minimal understanding of the concept linking the two passages and provides very little text-based support.

(from "Unfolding Bud")

Read these lines from the poem.

Yet one is surprised

To see the poem

Gradually unfolding,

Explain the poet's idea of how a poem unfolds. Be sure to thoroughly support your answer using examples and details from the passage. Write your answer on the lines below.

3-Point Response #1

The poet's idea of a poem unfolding is you have to gradually read it to understand it's true meaning. If you look at something first glance, it does not appear to be anything spectacular or anything to take a second glance at. If you watch something unfold, it takes on new meaning and you begin to see something different in which you never have noticed before. You appear to see it's inner self and it is then when you appreciate what is in front of you.

This response demonstrates a rather complete understanding of a poem's "unfolding," providing a thorough explanation of the process. The response also makes some use of text-specific detail ("inner self") in the way of support.

When you start to read a poem, you first don't know what it is really talking about. After you finish it you get an idea but you really didn't pay attention to the details and what it is trying to say. Therefore you have to read it over each time paying attention to different things, until you finally get it and know the true meaning. The words might look simple but the meaning is bigger.

And that's how the poem unfolds.

This response also shows a full comprehension of the concept at work in the poem and gives a detailed explanation of it. Though the response does not refer to many specific details from the poem itself, the student's grasp of the basic idea and the thoroughness with which he or she presents that idea are enough to award the student full credit.

2-Point Response #1

In the poem Unfolding Bud the poet talks about how a poem gradually unfolds. A poem unfolds as you read it. You read each line and begin to understand what it's talking about. The ideas and images go developing in your mind and you get what's going on.

This response demonstrates substantial comprehension of the concept but does not fully develop the reading in a well-coordinated way.

2-Point Response #2

The poet's idea shows how poems can cephar different meanings of words. That is why the poet inferred that the reader should think over again and again, in order to comprehend them.

This response shows a solid but ultimately imperfect understanding of the concept. Though it hints at a very insightful reading of the poem, the response does not provide enough support to fully explain the idea of how poems capture "different meanings of words."

1-Point Response #1

To see how the poem effects you. And how you feel after fully reading it and understanding the meaning.

This response demonstrates an incomplete understanding of the concept and a minimal interaction with the question.

1-Point Response #2

A poem unfolds by the way a poet writes. If the poet makes the poem boring and uninteresting the poem will not make a picture in a reader's mind. If a poet writes a poem with meaning and makes it interesting it will unfold into a readers mind as a picture, like a flower blooming.

This response also shows an incomplete understanding of the concept behind the poem. Though the student makes inferences about the poem's meaning, they are not supported by details from the text itself.

Chapter 5

Mathematics

Mathematics Manipulatives

Students will use CTB-approved punch-out tools during the test sessions. The table below shows which punch-out tools will be provided at each grade level. Students will be prompted to use the appropriate punch-out tool (e.g., "Use the centimeter side of your ruler to help you solve this problem."). The ruler or protractor icon will appear next to the item number box. Students in grade 5 will not be prompted to use their calculators, nor will a calculator icon be used.

Grade Level	Tools	Tool Features
3	ruler (U.S. customary and metric) pattern blocks	ruler interval: 1/2 inch, centimeter
4	ruler (U.S. customary and metric) pattern blocks pentomino (one asymmetrical shape used for the transformational geometry)	ruler interval: 1/4 inch, centimeter
5	ruler (U.S. customary and metric) pattern blocks	ruler interval: 1/8 inch, millimeter
6	ruler (U.S. customary and metric) protractor tangrams	ruler interval: 1/16 inch, millimeter
7	ruler (U.S. customary and metric) protractor	ruler interval: 1/16 inch, millimeter
8	ruler (U.S. customary and metric) protractor	ruler interval: 1/16 inch, millimeter
10	ruler (U.S. customary and metric) protractor	ruler interval: 1/16 inch, millimeter

Calculator Use Policy

The use of calculators varies by grade, and calculators must be made available to each student participating in the assessment.

Using calculators in grades 3 and 4 is prohibited for all sessions of the test. Only students whose IEP or Section 504 plan allows for the accommodation of calculator usage may use a calculator during the problem-solving sessions of the test. No student may use a calculator during the computation sessions of the test. Access to calculators in grades 5–8 and 10 is required, and calculators must be made available to each student participating in the assessment. CTB provides rulers and other manipulatives but does not supply calculators.

Grade	Calculator Usage	
3, 4	DPI Policy:	
	Calculators are prohibited.	
5, 6, 7, 8	DPI Policy:	
	There will be a non-calculator session.	
	Access to four-function calculators is required.	
	Use of a scientific calculator is a student option.	
	• Use of a graphing calculator is a district decision.	
	Additional Comments:	
	• Calculators or other electronic devices that possess any of the following features are not permitted:	
	— QWERTY keyboard	
	Devices that make noise or "talk"	
	 Touchscreen, electronic writing pad, pen-input or stylus- driven entry systems 	
	Removable memory units	
	Image capture or video recording or transmission	
	 Sound recording or transmission 	
	Wireless communication (infrared, cellular, radio, etc.)	
	Graphing calculator memory must be cleared.	
	Examiner manuals will provide procedures for clearing calculator memory before and after testing.	

Calculator Use Policy (continued)

Grade	Calculator Usage	
10	DPI Policy:	
	• There will be a non-calculator session.	
	Access to scientific or graphing calculators is required.	
	• Use of a graphing calculator is a district option.	
	Additional Comments:	
	• Calculators or other electronic devices that possess any of the following features are not permitted:	
	 — QWERTY keyboard 	
	Devices that make noise or "talk"	
	Touchscreen, electronic writing pad, pen-input or stylus-driven entry systems	
	Removable memory units	
	Image capture or video recording or transmission	
	 Sound recording or transmission 	
	— Wireless communication (infrared, cellular, radio, etc.)	
	Graphing calculator memory must be cleared.	
	Examiner manuals will provide procedures for clearing calculator memory before and after testing.	

Sample Mathematics Items: Selected Response

Mathematics items on the WKCE-CRT are aligned with the Wisconsin assessment frameworks. These items may be divided into six categories corresponding with the various reporting categories.

A. Mathematical Processes

This item deals with using reasoning and logic to perceive patterns. Students are expected to identify and apply the rule evident in the first five numbers.

The numbers below follow a pattern.

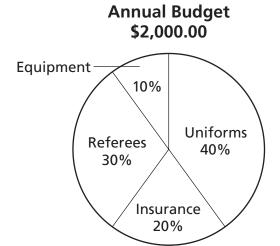
If this pattern continues, what will be the <u>10th</u> term?

- A) 52
- B) 65
- C)* 82
- D) 101

B. Number Operations and Relationships

This item demonstrates students' ability to select and use appropriate properties, computational procedures, and modes of representation with and without context (e.g., percents). Students are expected to follow a three-step process for this type of item.

The budget for a community youth football league is shown below.



There are 25 games played each year, and each game requires two referees. If the referees each make the same amount of money per game, how much money does each referee earn per game?

- A) \$6 per game
- B)* \$12 per game
- C) \$24 per game
- D) \$48 per game

B. Number Operations and Relationships (continued)

This item measures students' ability to compare, perform, and explain operations on real numbers with and without context (e.g., scientific notation). Students can also use their skills with place value while finding the solution.

In chemistry class, Cindy measured 380 grams of salt. From that amount, she took away 0.23 grams in order to perform the next step of her experiment. Which of these expressions correctly represents this subtraction in scientific notation?

A)
$$3.8 \times 10^{1} - 2.3 \times 10^{-1}$$

B)
$$3.8 \times 10^{1} - 2.3 \times 10^{-2}$$

C)*
$$3.8 \times 10^2 - 2.3 \times 10^{-1}$$

D)
$$3.8 \times 10^2 - 2.3 \times 10^{-2}$$

This item also measures students' ability to compare, perform, and explain operations on real numbers with and without context (e.g., scientific notation). Other items that measure this objective and sub-skill might ask students to determine reasonableness of answers and to select and use appropriate properties, computational procedures, and modes of representation with and without context.

A distant star is approximately 65 million light years from the Milky Way galaxy. There are approximately 9.46×10^{12} kilometers in 1 light year.

Which is the <u>best</u> approximation of the distance from the Milky Way galaxy to the distant star?

A)
$$6.149 \times 10^{19} \text{ km}$$

B)*
$$6.149 \times 10^{20} \text{ km}$$

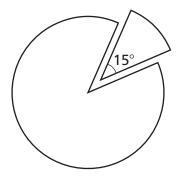
C)
$$6.149 \times 10^{21} \text{ km}$$

D)
$$6.149 \times 10^{22} \text{ km}$$

C. Geometry

This item focuses on students' ability to present convincing geometric arguments by means of informal proof, counter-examples, or other logical means. To find the correct solution, students must know the total number of degrees in a circle.

A board game manufacturer needs to cut wedge-shaped game pieces out of circular disks as shown below. Each game piece has a 15° central angle.



Note: The figure is not drawn to scale.

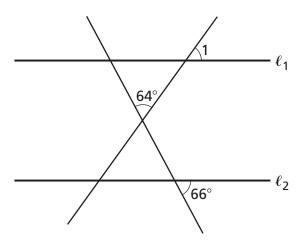
What is the <u>least</u> number of disks required to make 100 game pieces?

- A) 4
- B)* 5
- C) 12
- D) 24

C. Geometry (continued)

This item allows students to identify, describe, and analyze properties of two- and three-dimensional figures, relationships among figures, and relationships among their parts (e.g., complementary and supplementary angles). To find the correct solution, students must know the total number of degrees in both a circle and a triangle.

In the figure below, ℓ_1 is parallel to ℓ_2 .



Note: The figure is not drawn to scale.

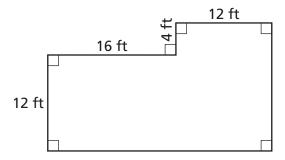
Based on the dimensions in the figure, what is the measure of Angle 1?

- A) 15°
- B)* 50°
- C) 70°
- D) 130°

C. Geometry (continued)

This item measures the ability to present convincing geometric arguments by means of informal proof, counter-examples, or other logical means. Other items that measure this objective and sub-skill might ask students to model problems using the Pythagorean theorem or to identify, describe, and analyze properties of two- and three-dimensional figures.

A homeowner is determining how many sheets of plywood are needed to cover the floor shown in the diagram below. Plywood is sold in 4-foot by 8-foot sheets.



Note: The figure is not drawn to scale.

If the sheets of plywood do <u>not</u> overlap, what is the least number of sheets needed to cover the floor?

- A) 11
- B)* 12
- C) 13
- D) 14

C. Geometry (continued)

This item deals with using the two-dimensional rectangular coordinate system and algebraic procedures to describe and characterize geometric properties and relationships (distance formula). Students should find the difference between the distances.

From its starting point a taxi must drive 4 miles due south, then 3 miles due east to reach its destination. All the roads are flat.

How many miles <u>shorter</u> would the drive be if there were a road providing a straight, direct route between the starting point and the destination?

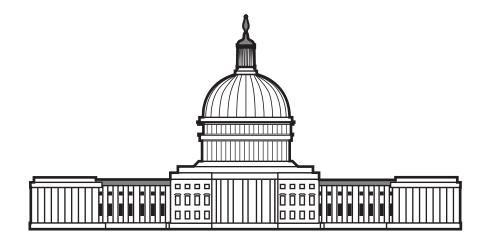
- A) 1 mile
- B)* 2 miles
- C) 5 miles
- D) 7 miles

D. Measurement

This item focuses on using proportional reasoning with a given ratio. Students are expected to follow a two-step process for this type of item.

Use the inch side of your ruler to help you solve this problem.

Jamie drew this picture of a historical building. The scale of the picture is 1 inch to 80 feet. What is the actual height of the building?

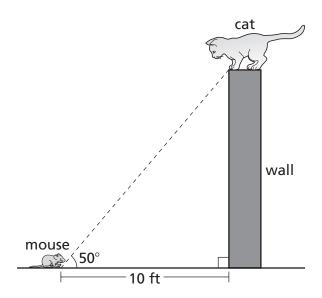


- A) 160 feet
- B)* 180 feet
- C) 200 feet
- D) 220 feet

D. Measurement (continued)

The item measures students' ability to use right-triangle trigonometry functions and the Pythagorean theorem to solve right-triangle problems. Other items that measure this objective and sub-skill might ask students to determine the perimeter/area of two-dimensional figures and determine the surface area/volume of three-dimensional figures.

A cat is sitting on the top of a wall. A mouse is looking up at the cat at a 50° angle. The mouse is 10 feet from the base of the wall.



Note: The figure is not drawn to scale.

How high is the wall? Round the answer to the nearest tenth of a foot.

- A) 6.4 feet
- B) 7.7 feet
- C) 8.4 feet
- D)* 11.9 feet

D. Measurement (continued)

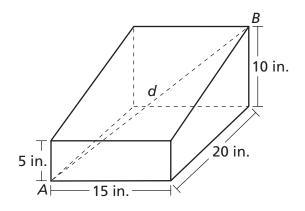
This item allows students to identify, describe and use derived attributes to represent and solve problems (e.g., money conversion). Students should choose the correct operation to solve the problem.

Renee is in Germany and wants to buy a coat that costs 209.16 euros. What would the cost of the coat be in U.S. dollars if 1 U.S. dollar = 0.7936 euros?

- A) \$160.00
- B) \$165.99
- C) \$250.00
- D)* \$263.56

This item deals with using the Pythagorean theorem to solve right-triangle problems. Students will analyze the figure before applying the formula.

Dan designs boxes to ship sculptures and other pieces of art. A diagram of one of the boxes is shown below.



About how long is the diagonal (d) from A to B?

- A) 25 inches
- B)* 27 inches
- C) 30 inches
- D) 37 inches

E. Statistics and Probability

This item gives students the opportunity to analyze, evaluate and critique methods and conclusions of statistical experiments (e.g., randomness, sampling, techniques, surveys). Students may be able to connect this item to their own experiences to help determine which hypothesis could not be tested.

Ms. Whitworth asked the students in her class to formulate hypotheses that they could test by collecting data. Which of these is not a testable hypothesis?

- A)* Milk chocolate tastes better than dark chocolate.
- B) The school cafeteria sells more hamburgers than cheese sandwiches.
- C) Twelfth-grade students are taller, on average, than ninth-grade students.
- D) There are more grocery stores in Argusville than there are in Stromtown.

This item focuses on students' ability to determine the likelihood of occurrence of simple and complex events (e.g., combinations and permutations). Reading the stem carefully can help students use the correct process and find the solution.

A band will perform the four songs shown below one time each. The songs are equally likely to be performed in any order.

School Spirit

Bird Call

Wintertime

Game Day

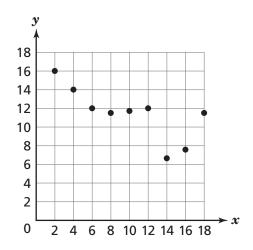
What is the probability that Bird Call will be performed first and Wintertime will be performed second?

- A) $\frac{1}{16}$
- B)* $\frac{1}{12}$
- C) $\frac{1}{8}$
- D) $\frac{1}{2}$

E. Statistics and Probability (continued)

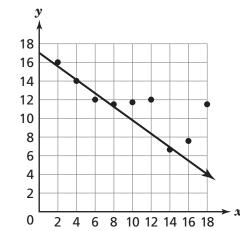
This item deals with interpreting, analyzing, and making predictions from organized and displayed data (e.g., measures of variation, such as line of best fit). Encourage students to evaluate each graph carefully.

Look at the scatter plot below.

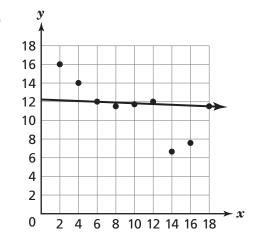


Which of these graphs shows the line of best fit?

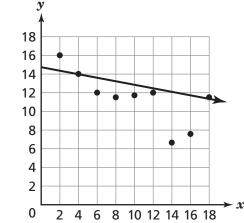
A)



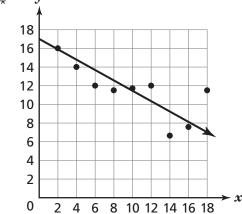
C)



B)



D)*



F. Algebraic Relationships

This item focuses on students' ability to model and solve a variety of mathematical and real-world problems by using algebraic equations. Students will convert fractional to decimal values and vice versa.

Nia drove at an average speed of 55 miles per hour to her cousin's house $137\frac{1}{2}$ miles away. How long did it take Nia to get to her cousin's house?

- A) $2\frac{1}{4}$ hours
- B)* $2\frac{1}{2}$ hours
- C) $2\frac{3}{4}$ hours
- D) 3 hours

This item focuses on modeling and solving a variety of mathematical and real-world problems by using algebraic equations. Students should pay close attention to the underlined word in the stem to find the correct solution.

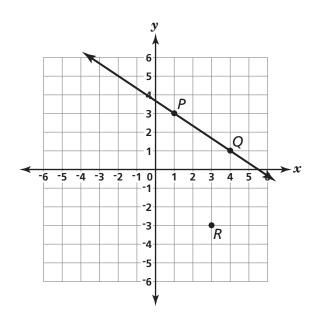
Hank is placing tiles in a hallway that measures 140 inches by 60 inches. Each tile measures 5 inches by 7 inches. If none of the tiles overlap and there is no space between tiles, what is the <u>least</u> number of tiles that will be required to cover the hallway completely?

- A) 200
- B) 212
- C)* 240
- D) 252

F. Algebraic Relationships (continued)

This item demonstrates students' ability to describe, recognize, interpret, and translate graphical representations of mathematical and real-world phenomena on coordinate grids. Students are expected to follow a two-step process for this type of item.

A line passing through points R and S is parallel to line PQ.



Which of these could be the coordinates of point *S*?

- A) (-3, -1)
- B)* (-3, 1)
- C) (3, -1)
- D) (3, 1)

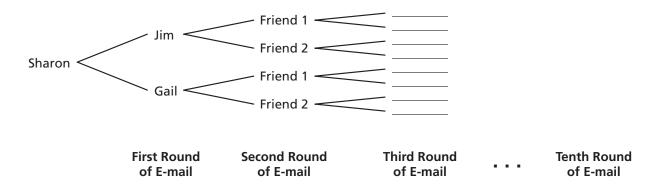
F. Algebraic Relationships (continued)

This item measures students' ability to model and solve a variety of mathematical and real-world problems by using algebraic expressions. Students must identify a pattern to find the solution.

Sharon is running for student body president. She e-mailed this message to 2 classmates, Jim and Gail.

"Please vote for Sharon and send this message to two friends."

Sharon was interested in knowing the number of people who would receive the message. She made the diagram below to help her find the answer.



If the pattern continues and no friend receives the message more than once, how many people will receive the message in the tenth round of e-mail?

- A) 256
- B) 512
- C)* 1,024
- D) 2,048

Mathematics Assessment Rubrics

General Rubrics for Two-Point Constructed-Response Items

2 points

- The student demonstrates a thorough understanding of the mathematical concepts and/or procedures represented in the problem.
- The student responds correctly to the problem, uses mathematical procedures and/or concepts, and provides clear and complete explanations and interpretations containing words, diagrams, or calculations unless otherwise specified.
- The response may contain minor flaws that do not detract from the demonstration of a thorough understanding of the problem.

1 point

- The student provides a response that is only partially correct.
- The student provides a correct solution, but may demonstrate a misunderstanding of the underlying mathematical concepts and/or procedures.
- The student provides a correct solution, but in place of showing his/her work writes, "I used my calculator."*
- The student provides a thorough demonstration of understanding the problem, but states an incorrect solution or conclusion.

O points

• The student provides a completely incorrect solution, a response that cannot be interpreted, or no response at all.

General Rubrics for Extended Constructed-Response Items

4 points

- The student demonstrates a thorough understanding of the mathematical concepts and/or procedures represented in the problem.
- The student responds correctly to the problem, uses mathematical procedures and/or concepts, and provides clear and complete explanations and interpretations containing words, diagrams, or calculations unless otherwise specified.
- The response may contain minor flaws that do <u>not</u> detract from the demonstration of a thorough understanding of the problem.

^{*}The student will not receive points for writing, "I used my calculator" on any part of the problem in place of showing his/her work.

3 points

- The student demonstrates an understanding of the mathematical concepts and/or procedures represented in the problem.
- The student's response to the problem is essentially correct.
- The mathematical procedures and/or concepts used and the explanations and interpretations provided demonstrate an essential, but less than thorough, understanding of the problem.
- The response may contain minor errors that reflect inattentive execution of mathematical procedures and/or concepts, or minor errors indicating some misunderstanding of the underlying mathematical concepts and/or procedures.

2 points

- The student demonstrates only a partial understanding of the mathematical concepts and/or procedures represented in the problem.
- Although the student may have used the correct approach to obtain a solution or may have provided a correct solution, the response lacks an essential understanding of the underlying mathematical concepts.
- The response contains errors related to the misinterpretation of important aspects of the problem, misuse of mathematical procedures and/or concepts, or misinterpretation of results.

1 point

- The student demonstrates a very limited understanding of the mathematical concepts and/or procedures represented in the problem.
- The response is incomplete and exhibits many flaws.
- Although the response may have addressed some of the conditions of the problem, the conclusion is inadequate and/or includes reasoning that was faulty or incomplete.
- The response exhibits many errors or may be incomplete.

O points

• The student provides a completely incorrect solution, a response that cannot be interpreted, or no response at all.

Sample Student Responses: Constructed Response

Jesse is flying from the Dane County Airport to Chicago. His plane is 1.5 miles above the ground when it begins to climb at an angle of 2° for the next 85 ground miles. 1.5 miles Note: The figure is not drawn to scale. How far above the ground is Jesse's plane after this climb? Write your answer and show your work in the box below.

miles

Answer:

Tangent =
$$\frac{Opposite}{Adjacent}$$

$$tan(2^\circ) = \frac{x}{85 \text{ mi}}$$

85mi.
$$\times \tan(2^\circ) = \times$$

Answer: 4.5 miles

Scoring Comments

This response provides the correct solution and demonstrates an understanding of the mathematical concepts necessary to solve the problem.

Score Point 2—Response #2

$$\tan 2 = \frac{a}{85}$$

$$a = tan 2(85)$$

$$a = .03492 (85)$$

$$1.5 + 2.96 = 4.46$$
 miles

Answer: 4.46 miles

Scoring Comments

This response also provides the correct solution and demonstrates an understanding of the mathematical concepts necessary to solve the problem.

$$\tan 2 = \frac{a}{85}$$

$$a = tan 2(85)$$

$$a = .03492 (85)$$

$$a = 2.93$$

Answer: 2.93 miles

Scoring Comments

This response gives only an incomplete solution of the problem and shows only partial understanding of the mathematical concepts necessary to solve the problem.

Score Point 1—Response #2

$$\sin 2^\circ = \frac{x}{85}$$

$$85(\sin 2^{\circ}) = x$$

$$85(.035) = x$$

$$2.96 = x$$

Answer: 4.46 miles

Scoring Comments

In this response, even though the student confuses *sin* for *tan*, he or she provides the correct response. Apart from this one error, the process is otherwise correct.

Gerald is starting a new job that will require commuting expenses. • He will work 5 days per week. • He will drive 43 miles from home to work and 43 miles from work to home each day. • His car averages 28 miles per gallon and gasoline costs \$1.15 per gallon. • He will pay \$8 per day for parking. He estimates that he will need \$40 per week for commuting expenses. In the box below, explain why Gerald's estimate is not reasonable, and show how you arrived at your answer. Explanation:

$$\frac{mi}{gallon}$$

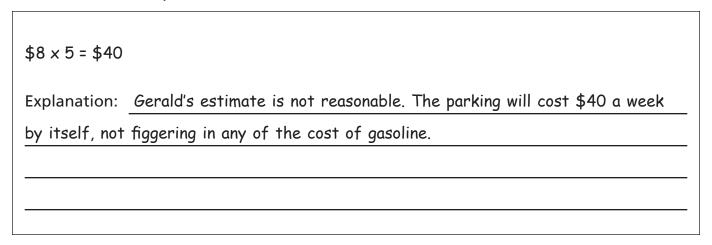
$$3.07 \text{ gallons} \times $1.15 \text{ per gallon} = $3.53$$

Explanation: This estimate is too small because he's going to be spending almost

\$60 a week on commuting expenses

Scoring Comments

In this response, the student correctly calculates the commuting expenses and uses those calculations to give a valid explanation of why the \$40 estimate is not accurate.



Scoring Comments

In this response, the student correctly calculates the expenses of parking. He or she then gives a valid explanation of why the estimate is not reasonable, pointing out that the cost of gasoline has not been factored into the estimate.

Score Point 1—Response #1

43	86 ÷ 28 = 3.07 gallons/day			
+43	3.07 × 5 = 15.35 gallons/week			
86 miles/day	15.35 x \$1.15 = \$17.66 for gas/week			
	\$17.66 + \$8(5) = \$57.66			
Explanation:				

Scoring Comments

This response provides a correct process for solving the problem, but it does not explain why Gerald's estimate is not reasonable.

43 miles/day \times 5 = 215 miles per week

 $215 \times $1.15 = 247.25 for gas per week

 $5 \times $8 = 40 for parking per week

Total per week: \$287.25

Explanation: Gerald's estimate is not reasonable because he is paying

\$40 just for parking. He totally forgot to include gas, which is going

to cost a LOT!!!!!

Scoring Comments

This response provides an incorrect process for solving the problem but accurately explains the flaw in Gerald's estimate.

	Company A: $V = -2t + 72$ Company B: $V = 5t + 23$
PART A	In the box below, solve the above system of equations for V and t . Use mathematics to explain your answer. You may use words, calculations, or diagrams in your explanation.
I	
PART B	On the lines below, explain what the solution to the system of equations represents.
PART B	·

Part A:

$$V = -2t + 72$$

$$V = 5t + 23$$

$$-2t + 72 = 5t + 23$$

$$49 = 7t$$

$$1 = 7$$

$$V = -2t + 72$$

$$V = 5t + 23$$

Part B: They represent the time (7 months) the stocks will be equal and at what value (\$58)

Scoring Comments

The response sets up valid equations and solves for *V* and *t* in Part A. In Part B, the student shows that he or she understands that the solution is the time when the two stocks have equal value.

Score Point 2—Response #2

Part A:

$$\frac{5}{2}$$
 $V = -5t + 180$ $58 = -2t + 72$ $V = 5t + 23$ -72 $V = 203$ $-14 = -2t$ $t = 7$

Part B: After 7 mon. both stocks trade @ \$58 ITS AN INTERSECTION of their graphs at (7, 58)

Scoring Comments

This response sets up valid equations and solves for *V* and *t* in Part A. In Part B, the student shows that he or she understands that the solution is the time when the two stocks are of equal value.

Part A:

$$\begin{array}{c}
 V + 2t = 72 \\
 \hline
 V - 5t = 23 \\
 \hline
 0 + 7t = 49
 \end{array}$$

$$\begin{array}{c}
 V = 5(7) + 23 \\
 V = 35 + 23
 \end{array}$$

$$V = 58$$

Part B: The dollar value is rising faster in Company A because it didn't take as many months as Company B.

Scoring Comments

As in the previous responses, this response also sets up equations and successfully solves for V and t in Part A. In Part B, however, the student does not demonstrate that the solution is the time when the two stocks are at equal value.

Score Point 1—Response #2

Part A:

Part B: The dollar value and the amount of time the stocks were monitored.

Scoring Comments

This response also sets up equations and successfully solves for *V* and *t* in Part A. In Part B, the student does not show these values represent the time when the stocks sold at the same price.

Chapter Appropriate Test Preparation Practices

Before Administering the Test

Prepare in advance

It is important that students are prepared to do their best on the WKCE–CRT; they should understand the purpose and format of the test and how test results will be used.

Explain the Purpose of the WKCE-CRT to Students

The test is most accurate as a measure of students' abilities when students are interested, confident, and understand testing procedures. Help students to understand the how and why of the WKCE–CRT, making sure to let them understand the reasons for the test and why it is important.

Inform students as to the role of standardized testing in the educational process, and discuss the difference between standardized assessment and classroom assessment. It is important to specifically address the fact that the WKCE–CRT serves solely as a means of measuring the skills and concepts that students have mastered. Students should be reminded that their scores on the WKCE–CRT will not affect their grades.

Review testing schedules beforehand

It is important to know the testing schedule for your school in order to ensure that the testing process goes as smoothly as possible. Regular coursework should be arranged so that there is enough time for testing without interruption.

Similarly, it is also important to anticipate possible issues regarding accommodations for English language learners and students with disabilities. Familiarize yourself with the requirements and guidelines surrounding these accommodations as found on the DPI website at http://dpi.wi.gov/oea/specneed.html.

Introduce Test-taking Strategies in the General Curriculum

A rich curriculum and good teaching practices are the best preparation for the test. As a part of that curriculum, however, it may be beneficial to familiarize students with some of the tasks and constraints they will encounter on the WKCE–CRT. Giving students many experiences with timed work as part of a regular curriculum can help students feel more comfortable with the format of the WKCE–CRT. Also, familiarity with selected-response and brief constructed-response items in their daily curriculum can help students to feel comfortable with the material on the WKCE–CRT.

Reading Endurance

One of the best ways to help students prepare for the reading section of the WKCE–CRT is to increase students' reading endurance. A particularly effective method of doing this is simply to allow students longer periods of uninterrupted reading as a part of the regular curriculum.

Teachers can begin by assigning students longer passages that have been divided into smaller sections, so as to incrementally transition students into extended periods of self-directed reading. Students can then be introduced to longer and longer periods of uninterrupted reading, gradually increasing the time spent and the length of the passages.

Ideally, students should be given regular opportunities to read for 45 minutes without interruption. As students expand their reading skills, teachers should model ways of synthesizing the various parts of a text.

Before the Test: Advice for Students and Parents

Students and their parents also have important roles to play when it comes to preparing for testing. By addressing some issues relating to testing beforehand, both students and parents will better know what to expect.

Inform students that they will not be allowed to bring into the testing area cell phones, camera phones, personal digital assistants (PDAs), any device with infrared or Bluetooth technology, or any other form of wireless communication. In addition, students will not be permitted to use any form of wireless communication during short breaks in the testing session.

Parents or guardians should be informed about the test and should participate in preparing their children. Send a letter informing parents or guardians of the testing date, the kind of test to be given, and the purpose and importance of the test.

On the Day of the Test

- Convey a positive attitude, encouraging students to do their best.
- Let students know the importance of paying attention to instructions. If students do not hear or do not understand the directions, they should be encouraged to ask questions.
- It is also important that students know to use their time efficiently and that they should review their answers if time allows. If students do not know the answer to a question, they should go on to the next item and come back later.
- Students should be encouraged to attempt to answer all questions. Students should also be aware, however, that they may not be able to answer every question correctly, as some of the content they encounter may not have been addressed recently in class.
- Students should read selected-response questions carefully, noting key words. Remind students that they should try to determine the correct answer before looking at the answer choices, and that they should eliminate choices that they know are incorrect.
- Remind students to record their answers accurately and to check them with care.

Advice for Students

Discuss the following suggestions with students in the weeks prior to the test.

- Relax. Being a little nervous before a test is completely normal.
- Be sure to listen to the instructions. If you cannot hear or do not understand the instructions, it is important that you ask questions.
- Different sections may have different directions. Make sure that you listen to and read all instructions carefully.
- Make sure that you understand what a question is asking for before answering it.
- Eliminate answer choices that you know are incorrect.
- Use your time efficiently. Don't spend too much time on one section. If you find that an item is particularly difficult, it may be best to move on to the next question and then go back to the difficult questions if you have extra time.

- If you have extra time after completing a section, it may be worthwhile to go back and check your answers.
- Trust your instincts. When rechecking your answers, only change your response if you know that the previous answer was incorrect.
- Keep a positive attitude.
- Concentrate on doing your best.
- Know that you will have a chance to talk about the test afterwards, and that you will be able to talk to your teacher about your scores, should you want to.

Advice for Parents

In the letter sent to parents or guardians, it may be useful to include some of the following suggestions:

- Encourage your children to employ good test-taking habits: follow directions carefully, avoid careless errors, recheck work.
- Remind students that the WKCE–CRT is simply a tool for measuring what students have learned so far, and that test scores do not affect grades. Extra studying just prior to taking the test will most likely not help.
- Though the test is important, students should be encouraged not to be nervous about the test. Students who are calm and self-confident do better on tests.
- Students should get plenty of sleep and have a good, nourishing breakfast and lunch. Test taking requires a good deal of energy.
- Be sure your child gets to school on time. Rushing and worrying about being late can affect performance.
- Remember to ask your child about the testing at the end of each day. When
 results arrive, discuss the results and any concerns with your child. Ask
 your child's teacher about any information on the score report that is not
 understood.
- Meet with teachers to discuss your child's progress.

After the Test

Give students an opportunity to talk about the test after it has been administered. Some students may be curious or anxious about their performance, and having the chance to share those feelings with others may be beneficial. When scores arrive, explain test scores to students individually so that they have an accurate picture of their performance when seen in a larger context.



20 Ryan Ranch Road Monterey, CA 93940-5703

